

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A power supply system for outputting power, comprising:
 - a fuel cell furnished with a proton-conductive electrolyte layer and a hydrogen-permeable metal layer joined to the proton-conductive electrolyte layer;
 - a fuel gas feeder that feeds a hydrogen-containing fuel gas to an anode side of the fuel cell;
 - a purge gas feeder that is connected to a mixer and feeds a purge gas devoid of hydrogen to the anode side of the fuel cell via the mixer;
 - a purge decision unit that, once power generation in the fuel cell stops, decides whether a purge condition under which the purge gas should be supplied to the anode side of the fuel cell is met; and
 - a purge controller that, in an event that the purge decision unit decides that the purge condition is met, actuates the purge gas feeder to replace the hydrogen-containing fuel gas within the fuel cell with the purge gas devoid of hydrogen, or in an event that the purge decision unit decides that the purge condition is not met, does not actuate the purge gas feeder.
- feeder, wherein:

the fuel cell is configured to release all anode exhaust gas into the air.

2. (Canceled)
3. (Previously Presented) A power supply system according to claim 1, wherein the decision by the purge decision unit as to whether the purge condition is met is executed on a basis of at least one of a prescribed information representing an operational status of the

power supply system and a prescribed information reflecting a change in power required by the power supply system.

4. (Previously Presented) A power supply system according to claim 1, wherein the purge controller actuates the purge gas feeder once a prescribed time period has elapsed after power generation by the fuel cell has stopped.

5. (Previously Presented) A power supply system according to claim 1, further comprising a fuel gas pressurizing unit that, once power generation by the fuel cell has stopped but the purge gas feeder is not actuated, raises a pressure of the hydrogen-containing fuel gas in a fuel gas flow passage formed in the fuel cell.

6. (Previously Presented) A power supply system according to claim 5, wherein the fuel gas pressurizing unit raises the pressure of the hydrogen-containing fuel gas by actuating the fuel gas feeder to supply the hydrogen-containing fuel gas, while blocking an outlet of the fuel gas flow passage.

7. (Previously Presented) A power supply system according to claim 3, further comprising a temperature sensing unit that senses a temperature at a prescribed location that is part of the power supply system and that operates at a temperature which rises to a prescribed high temperature during power generation by the fuel cell,

wherein the purge decision unit decides that the purge condition is met as long as the temperature sensed by the temperature sensing unit does not go above a prescribed value.

8. (Previously Presented) A power supply system according to claim 1, wherein when power generation by the fuel cell commences after the purge gas feeder has been actuated, the fuel gas feeder supplies the fuel cell with hydrogen-containing fuel gas at a level in excess of a level corresponding to a power to be generated by the fuel cell.

9. (Previously Presented) A fuel cell supply system according to claim 8, wherein the fuel gas feeder, when the power to be generated by the fuel cell is equal to or less than a prescribed value, supplies the hydrogen-containing fuel gas at a level in excess of the level corresponding to the power to be generated; or when the power to be generated is greater than the prescribed value, supplies the hydrogen-containing fuel gas at a level corresponding to the power to be generated.

10. (Previously Presented) A fuel cell system according to claim 1, further comprising a secondary cell.

11. (Previously Presented) A power supply system according to claim 10, further comprising a state of charge sensing unit that senses a state of charge of the secondary cell, wherein in the event that the state of charge is equal to or less than a prescribed value, charging of the secondary cell is carried out using the fuel cell, with priority over an operation of shutting off power generation by the fuel cell.

12. (Previously Presented) A power supply system according to claim 3, further comprising:

a secondary cell; and
an output request acquiring unit that acquires an output request to the power supply system;

wherein when the output request acquired by the output request acquiring unit is equal to or less than a prescribed value, the purge decision unit decides that the purge condition is not met, and outputs power from the secondary cell.

13. (Withdrawn) A mobile object comprising:

the power supply system according to claim 1 installed on board as a drive energy supply.

14. (Withdrawn) A mobile object comprising:

the power supply system according to claim 1 installed on board as a drive energy supply; and

a predetermined start switch that enables driving of the mobile object;
wherein the purge controller actuates the purge gas feeder once a prescribed time period has elapsed after the predetermined start switch has turned off and power generation by the fuel cell has stopped.

15. (Withdrawn) A mobile object comprising:

the power supply system according to claim 3 installed on board as a drive energy supply; and

a predetermined start switch enabling driving of the mobile object;
wherein when the predetermined start switch has turned off, the purge decision unit decides that the purge condition is met.

16. (Withdrawn) A mobile object comprising:

the power supply system according to claim 1 installed on board as a drive energy supply; and

an actuation status acquiring unit that acquires the actuation status from an actuating unit for driving the mobile object;

wherein after the purge gas feeder has been actuated during stop of the fuel cell, when the actuation status acquiring unit has acquired the actuation status after the purge gas feeder has been actuated during stop of the fuel cell, the purge controller halts the purge gas feeder.

17. (Withdrawn) A mobile object according to claim 16, wherein

the power supply system further comprises a temperature sensing unit that senses a temperature of the fuel cell, and a secondary cell serving as another drive energy supply for the mobile object;

wherein when the fuel cell temperature sensed by the temperature sensing unit is equal to or less than a prescribed value, the purge controller continues to actuate the purge gas feeder, even in an event that the actuation status acquiring unit has acquired the actuation status after the purge gas feeder has been actuated during stop of the fuel cell.

18. (Withdrawn-Currently Amended) A method of stop a fuel cell system, comprising the steps of:

(a) during power generation by a fuel cell comprising a proton-conductive electrolyte layer and a hydrogen-permeable metal layer joined to the proton-conductive electrolyte layer, by supplying a hydrogen-containing fuel gas to the anode side of the fuel cell, acquiring a stop condition of the fuel cell, wherein the fuel cell releases all anode exhaust gas into the air;

(b) after acquiring the stop condition in step (a), selecting, as operating mode of the fuel cell system, an operating mode that is either a standby mode wherein power generation is halted while holding the hydrogen-containing fuel gas in a fuel gas flow passage within the fuel cell, or a stop mode wherein power generation is halted without holding the hydrogen-containing fuel gas in the fuel gas flow passage within the fuel cell; and

(c) in the event that the stop mode has been selected, supplying a purge gas devoid of hydrogen to the fuel gas flow passage within the fuel cell.

19. (Canceled)

20. (Withdrawn-Currently Amended) A mobile object comprising:

a power supply system installed on board as a drive energy supply for the mobile object, comprising:

a fuel cell having a proton-conductive electrolyte layer and a hydrogen-permeable metal layer joined to the proton-conductive electrolyte layer,

a fuel gas feeder that feeds a hydrogen-containing fuel gas to an anode side of the fuel cell,

a purge gas feeder that feeds a purge gas devoid of hydrogen to the anode side of the fuel cell, and

a purge controller that, once power generation in the fuel cell stops, actuates the purge gas feeder to replace the hydrogen-containing fuel gas within the fuel cell with the purge gas; and

an actuation status acquiring unit that acquires the actuation status of an actuating unit for driving the mobile object,

wherein the purge controller, after actuating the purge gas feeder during stop of the fuel cell, halts the purge gas feeder when the actuation status acquiring unit has acquired the actuation status.status, wherein:

the fuel cell is configured to release all anode exhaust gas into the air.

21. (Previously Presented) A power supply system according to claim 1, wherein the purge controller, (1) in an event that the purge decision unit determines that the purge condition is met, allows actuation of the purge gas feeder by opening a valve provided downstream of the anode side of the fuel cell to replace the hydrogen-containing fuel gas within the fuel cell with the purge gas, or (2) in an event that the purge decision unit determines that the purge condition is not met, prohibits the actuation of the purge gas feeder by closing the valve.